

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-16 (Cancelled)

17. (New) A nozzle arrangement for applying fluid containing solid particles to a substrate moving relative to the nozzle arrangement, comprising:

an endpiece;
an endpiece receiving element operatively coupled to said endpiece; and
a nozzle piece operatively coupled to said endpiece receiving element;
said endpiece, endpiece receiving element, and nozzle piece together defining a fluid channel, said fluid channel including a connecting channel, a distribution channel, and an outlet channel, said connecting channel having a first longitudinal axis, said distribution channel having a second longitudinal axis, and said outlet channel having a third longitudinal axis, and said outlet channel terminating in a fluid outflow slit, wherein said second longitudinal axis has a change in directional orientation relative said first longitudinal axis less than about 90°, and wherein said third longitudinal axis has a change in directional orientation relative said second longitudinal axis less than about 90°.

18. (New) A nozzle arrangement according to claim 17, wherein said second longitudinal axis of said distribution channel extends at an angle between about 5° and about 25° relative said first longitudinal axis of said connecting channel.

19. (New) A nozzle arrangement according to claim 17, wherein said distribution channel further includes an entrance, an exit, and a length defined therebetween, wherein cross sectional areas of said distribution channel along said length of said channel from said entrance to said exit converge along a first channel dimension and expand along a second channel dimension substantially perpendicular to said first channel dimension resulting in a substantially constant cross sectional area of said distribution channel.

20. (New) A nozzle arrangement according to claim 17, wherein said endpiece further includes a contact surface for contacting said substrate, said contact surface bound on one side by said fluid outflow slit.

21. (New) A nozzle arrangement according to claim 20, wherein an angle between said third longitudinal axis of said outlet channel and said contact surface proximate said fluid outflow slit is acute.

22. (New) A nozzle arrangement according to claim 17, further comprising a pressurized gas channel that is connectable to a source of pressurized gas and operative to direct pressurized gas towards said fluid outflow slit for removing fluid collected proximate said fluid outflow slit.

23. (New) A system for applying fluid containing solid particles on a substrate comprising:

a nozzle arrangement, including:

an endpiece;

an endpiece receiving element operatively coupled to said endpiece; and

a nozzle piece operatively coupled to said endpiece receiving element;

said endpiece, endpiece receiving element, and said nozzle piece together defining a fluid channel, said fluid channel including a connecting channel, a distribution channel and an outlet channel, said connecting channel having a first longitudinal axis, said distribution channel having a second longitudinal axis; and said outlet channel having a third longitudinal axis, said outlet channel terminating in a fluid outflow slit, wherein said second longitudinal axis has a change in directional orientation relative said first longitudinal axis less than about 90°, and wherein said third longitudinal axis has a change in directional orientation relative said second longitudinal axis less than about 90°; and

a transport device configured to produce a relative motion between said nozzle arrangement and the substrate along a transport direction, said third longitudinal axis and said transport direction defining an obtuse angle therebetween.

24. (New) A system according to claim 23, further comprising a fluid supply line, a fluid drain line, a flow channel connecting said fluid supply line and said fluid drain line and a filter arrangement having a planiform filter element positioned in said flow channel, wherein cross sectional areas of said fluid supply line, said fluid drain line, said flow channel and said filter element are essentially of equal size.

25. (New) A system according to claim 23, wherein said flow channel has an essentially linear path and a surface of said filter element is transverse to a flow direction of said flow channel.

26. (New) A system according to claim 25, further comprising a plurality of planiform filter elements having a decreasing mesh size in a flow direction, said plurality of planiform filter elements positioned inside said flow channel.

27. (New) A filter arrangement comprising:

a fluid supply line;

a fluid drain line;

a flow channel connecting said fluid supply line and said fluid drain line;

and

a planiform filter element positioned in said flow channel, wherein cross sectional areas of said fluid supply line, said fluid drain line, said flow channel, and said planiform filter element are essentially of equal size.

28. (New) A filter arrangement according to claim 27 wherein said planiform filter element further comprises a plurality of planiform filter elements positioned generally perpendicular to said flow channel and having decreasing mesh size in a direction of flow in said flow channel.

29. (New) A filter arrangement according to claim 28 wherein said planiform filter elements include a filtering surface and said filtering surface is oriented generally perpendicular to the direction of flow.